

# Patient Communication Following Head and Neck Cancer Surgery: A Pilot Study Using Electronic Speech-Generating Devices

Mary Beth Happ, PhD, RN, Tricia K. Roesch, MSN, CRNP,  
and Sarah H. Kagan, PhD, RN, FAAN, AOCN®

**Purpose/Objectives:** To describe the communication of patients who received electronic speech-generating devices (SGDs) following surgical procedures for head or neck cancer.

**Design:** Exploratory, complementary mixed methods.

**Setting:** Otolaryngology surgical inpatient unit of an urban teaching hospital.

**Sample:** 10 purposively selected patients with a mean age of 57.1 years (SD = 12.8 years) and moderately severe illness (Acute Physiology and Chronic Health Evaluation III score  $\bar{X} = 27.1 \pm 13.2$ ) who had SGDs in their hospital rooms for  $9.1 \pm 6.2$  days.

**Methods:** Observation, interviews, questionnaires, and clinical record review.

**Main Research Variables:** Communication methods, communication content, SGD use, communication quality (i.e., ease and user satisfaction), barriers to SGD use, and patient clinical characteristics.

**Findings:** SGDs were used in message construction in 8 (17%) out of 48 total observed communication events. Writing (31%) and nonverbal communication (46%) were the most frequently observed primary methods of communication used by patients with head and neck cancer postoperatively. Five patients demonstrated occasional SGD use with or without cuing, and one used the SGD as the dominant communication method. Ease of Communication Scale scores showed only slightly less difficulty with communication when compared to a historic control group. Patients initiated communications more often when SGDs were used in message construction. Poor device positioning, staff unfamiliarity with SGDs, and patient preference and ability for writing were barriers to SGD use.

**Conclusions:** Although writing and making gestures were the most common communication methods, SGDs were used successfully by selected patients and may be particularly beneficial for constructing complex messages during conversation.

**Implications for Nursing:** SGDs may be an appropriate assistive communication strategy for postoperative patients with head and neck cancer. Nurses can facilitate effective patient communication with SGDs by cuing patients on device options and positioning SGDs within easy reach.

Patients with head and neck cancer often experience frustrating and socially isolating communication problems during the period in which they are unable to speak following surgery. However, patient communication during the immediate postoperative period has received little attention in research or clinical practice literature (Happ, Roesch, & Kagan, 2004). This article describes the communication methods and communication content of 10 intubated patients who received electronic speech-generating devices (SGDs) following surgical procedures for head or neck

## Key Points . . .

- Writing was the most common communication method used and preferred by nonspeaking patients with head and neck cancer following surgical procedures.
- Electronic speech-generating devices (SGDs) may be most effective when used by patients for complex communications.
- Staff education on cuing patients and proper positioning and repositioning of SGDs within easy reach is critical in facilitating SGD use for patient communication.

cancer, with a particular focus on SGD use, communication quality (i.e., ease and user satisfaction), barriers to SGD use, and clinical characteristics (e.g., age, illness severity, cancer diagnosis or surgical procedure, sedation or narcotic medications) of SGD users.

## Literature Review

Studies of communication between nurses and nonspeaking, intubated patients in intensive care units (ICUs) have demonstrated that most interactions involve brief, task- or procedure-oriented information, commands, or reassurances (Ashworth, 1980; Hall, 1996; Leathart, 1994; Salyer & Stuart,

*Mary Beth Happ, PhD, RN, is an associate professor in the School of Nursing at the University of Pittsburgh in Pennsylvania. At the time the study was conducted, Tricia K. Roesch, MSN, CRNP, was a graduate student researcher in the School of Nursing at the University of Pittsburgh and currently is a nurse practitioner in the Division of Cardiac Surgery at the University of Maryland Medical Center in Baltimore. Sarah H. Kagan, PhD, RN, FAAN, AOCN®, is an associate professor in Gerontological Nursing at the University of Pennsylvania in Philadelphia. This research was funded by an ONS Foundation Research Grant supported by Ortho Biotech Products. AbleNet, Inc., DynaVox Technologies, and WordsPlus, Inc. loaned equipment for this study. (Submitted October 2004. Accepted for publication February 17, 2005.) (Mention of specific products and opinions related to those products do not indicate or imply endorsement by the Oncology Nursing Forum or the Oncology Nursing Society.)*

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